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Customer Number

Patent
Case No.: 58460US002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: VERNSTROM, GEORGE D.
Application No.: 10/674594 Confirmation No.: 4487
Filed: September 29, 2003 Group Art Unit 1745
Title: FUEL CELL CATHODE CATALYST

REPLY BRIEF ON APPEAL

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Signed by: Phyllis Boettcher



Dear Sir:

This is an appeal from the Office Action mailed on July 3, 2006, finally rejecting claims 1-25. A Notice of Appeal in this application was mailed on October 3, 2006, and was received in the USPTO on October 3, 2006. A Brief on Appeal was transmitted April 3, 2007. A Notification of Non-Compliant Appeal Brief was mailed May 21, 2007. An Amended Brief on Appeal was mailed July 20, 2007. An Examiner's Answer was mailed November 1, 2007.

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ARGUMENT

Applicants previously noted that the Office Action finally rejecting the present claims recognized numerous claim limitations recited in all of the present claims that were not taught in Debe, the single reference which is the basis of these § 103 rejections, including:

- 1) a first layer comprising platinum and said second layer being an alloy or intimate mixture of iron and a second metal selected from the group consisting of Group VIb metals, Group VIIb metals and Group VIIIb metals other than platinum and iron,
- 2) where the atomic ratio of iron to said second metal in said second layer is between 0 and 10,
- 3) where the planar equivalent thickness ratio of said first layer to said second layer is between 0.3 and 5, and
- 4) wherein the average bilayer planar equivalent thickness of said first and second layers is less than 100 Å.

The Examiner's Answer again fails to find any specific teaching of these claim limitations in the Debe reference. With particular regard to limitations 3) and 4) above, the Answer points only to teachings in Debe reciting the capabilities of vacuum deposition, but fails to point to any teaching or suggestion of these limitations required in each of the pending claims, nor any similar limitations.

In addition, the Examiner's Answer notes that "iron (Fe) is not explicitly disclosed" in the Debe reference. (Examiner's Answer at page 12, lines 15-16). Applicants note that claim 3 recites, "the atomic ratio of iron to said second metal in said second layer is between 0.01 and 10".

Since no *prima facie* case of obviousness is made over this single reference, Applicants assert that the rejection of claims 1-25 under 35 U.S.C. § 103(a) should be reversed.

CONCLUSION

For the foregoing reasons, appellants respectfully submit that the Examiner has erred in rejecting this application. Please reverse the Examiner on all counts.

Respectfully submitted,

By:

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January 2, 2008

Date

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